

### **REMARKS**

The Applicant has filed the present Response in reply to the outstanding Official Action of June 3, 2005, and the Applicant believes the Response to be fully responsive to the Official Action for the reasons set forth below in greater detail.

At the onset, Applicant would like to thank the Examiner for indicating that Claims 1-10 are allowed and that Claims 12-22 and 27 have allowable subject matter and would be allowable if rewritten in an independent form including all of the limitations of the base claim and any intervening claims. However, since Applicant disagrees with the rejection, Applicant does not feel that any amendment is needed at this time. Additionally, Applicant notes that Claim 24 has been amended to overcome the Examiner's objection. The typographical errors have been fixed. No new matter has been added.

In the outstanding Official Action, the Examiner rejected Claims 11 and 23-26 under 35 U.S.C. § 102(b) as being anticipated by Braudaway, et al., United States Patent No. 5,825,892 (hereinafter "Braudaway"). Applicant respectfully disagrees with the Examiner's rejection and traverses with at least the following analysis.

Applicant submits that the Examiner's interpretation of the reference is incorrect.

The Examiner must review the entire prior art reference to make a rejection; the Examiner cannot just pick and choose the parts that read on a claim or allegedly read on the claim and ignore the remaining portion of the reference. See W.L. Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q 303 (Fed. Cir. 1983) (A prior

art reference must be considered in its entirety, as a whole, including portions that would lead away from the claimed invention).

The cited reference contains disclosures of several distinct methods and circuits: (a) marking an image with a robust watermark, (b) constructing the watermarking plane, and (c) finding an invisible watermark hidden in a marked image (detecting the watermark in a marked image).

Claims 11 and 23-26 are directed to inserting or marking an image with a robust watermark and not to detecting the watermark image. In the Examiner's rejection, the Examiner combines two distinct portions of the reference to read on the claim, i.e., marking and finding.

The reference, however, does not support this interpretation. The disclosure clearly delineates the two functions as separate and distinct functions and circuits. In fact, the reference uses two distinct figures and elements.

The reference teaches inserting a watermark into an image and adjusting the degree of insertion. However, the reference fails to teach a counter, which counts a number  $N_A$  of times selection is made in said selection circuit and a number  $N_3$  of times the third data is selected; and an adjustment circuit which adjusts the insertion degree, based on the numbers counted by said counter, as specifically recited in Claim 11.

The Braudaway reference discloses that a counter is used for detection purposes and not an insertion or adjustment purpose.

Specifically, the reference states:

The selector is used to locate rectangular clusters of pixels in the marked image and corresponding clusters of elements in the reconstituted watermarking plane. . . One embodiment uses two selector devices, one called a "coincidence counter" and the other a "non-coincidence counter." ....

Col. 16, line 20-31.

The coincidence counter associated with that selector element is incremented by unity for each color plane producing a positive result and the non-coincidence counter is incremented by unity for each color plane that produces a negative result. The purpose of each element's coincidence and non-coincidence counters is to associate with that element a confidence level of the watermark's identification with the random sequence known only to the marker and/or the marking entity.

Col. 16, line 40-50

The count in each coincidence counter is the accumulated sum of the counts of positive results for corresponding pixels at each cluster location, and the count in each non-coincidence counter is the accumulated sum of the counts of negative results for corresponding pixels at each cluster location. A coincidence counter value larger than the value of its corresponding non-coincidence counter is associated with a partial watermark detection. A composite of coincidence counter values greater than their corresponding non-coincidence counter values for a preponderance of the selector's elements results from and corresponds with a detected watermark.

Col. 16: 60-Col. 17:4

The values contained within each coincidence and non-coincidence counter associates with their corresponding selector's element a confidence level of the watermark's identification with the random sequence known only to the marker and/or the marking entity. The watermark is considered to be detected if a preponderance of the differences of coincidence counter values less their respective non-coincidence counter values are nonnegative. Thus, an examination of the totality of

these nonnegative differences explicitly suffices for declaring the watermark detected or not detected.

18:31-41

Additionally, the counters are not used for counting a selection of either the first data or the third data. Specifically, the reference states:

The values of the particular watermarking plane element and the corresponding pixel color element are compared to their respective neighborhood averages. If both values are equal to or greater than their respective neighborhood averages, 717, or if both values are less than their respective neighborhood averages, 718, the coincidence counter of that particular selector element is incremented, 719a. If one value is less than its respective neighborhood averages and the other value is equal to or greater than its respective neighborhood averages, the non-coincidence counter of that particular selector element is incremented, 719b. The magnitude of the value in each coincidence counter relative to the magnitude of the value in its corresponding non-coincidence counter is associated with the probability of watermark sequence validation.

17:53-67.

Clearly, the counter does not count the claimed value nor is the counter used for the claimed function.

Furthermore, the reference does not teach adjusting the insertion degree based upon the counted number by the counter. Braudaway solely teaches that the modulation strength can be adjusted.

**As previously stated** in all cases the black border is not part of the visualizer-coincidence image. A stronger replication of the visualizer, 1202, resulting for an imparted watermark made at a modulation strength of 2% is shown in FIG. 12. A still stronger replication of the visualizer, 1302, resulting for an

imparted watermark made at a modulation strength of 4% is shown in FIG. 13.

19:42-50.

However, the reference does not teach that the modulation strength is changed based upon the counted value, but **rather depending on the degree of textual variation in the image itself**. 7:50-51.

Accordingly, Applicant submits that Braudaway, in no way, teaches, suggests or renders obvious each and every limitation of Claim 11. Accordingly, Claim 11 is patentably distinct from the cited reference.


Applicant further submits that Claims 23-26 are patentable based upon the above-identified analysis.

For all the foregoing reasons, the Applicant respectfully requests the Examiner to withdraw the rejections of independent Claims 11, and 23-26 pursuant to 35 U.S.C. § 102(b).

In conclusion, the Applicant believes that the above-identified application is in condition for allowance and henceforth respectfully solicits the Examiner to allow the application. If the Examiner believes a telephone conference might expedite the allowance of this application, the Applicant respectfully requests that the Examiner call

the undersigned, Applicant's attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Seth Weinfeld", written in a cursive style.

Seth Weinfeld  
Registration No. 50,929

Scully, Scott, Murphy & Presser, P.C.  
400 Garden City Plaza, Suite 300  
Garden City, NY 11530

SW:ae